

Abstract of the disclosure

Logic circuit generating four binary outputs as four threshold functions of four binary inputs, including: first, second, third, and fourth threshold functions which are respectively high if at least one, two, three and all of the binary inputs are high; first logic having two logic parts that each include NOR and NAND gates, and having two first-level inputs for receiving the binary inputs and two first-level outputs; and second logic having four second-level outputs, four second-level inputs for receiving second-level binary inputs and connected to the four first-level outputs, NAND gate, first gate generating logical OR combinations and NAND combining the logical OR combination with two other second-level binary inputs, a second gate generating logical OR combinations of two pairs of second-level binary inputs and NAND combining the logical OR combinations, and a NOR gate; wherein one of four binary outputs is generated at each of the four outputs.